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**18, Kelhanhondori 2-chome**  
**Moriguchi-shi Osaka-fu(JP)**

**(72) Inventor: Asano, Yoshikazu**  
**139, Nakanagatsuka-cho 1-chome**  
**Kakamigahara-shi, Gifu-ken(JP)**

**74) Representative: Glawe, Delfs, Moll & Partner  
Patentanwälte  
Postfach 26 01 62 Liebherrstrasse 20  
W-8000 München 26(DE)**

⑦① Applicant: **SANYO ELECTRIC CO., LTD.**

57) A converter for converting a sub-sample television signal such as MUSE signal, which is obtained from a high density television signal by way of offset sub-sampling the horizontal scan lines of the high density television signal and time compressing the transmission band, to a standard television signal includes odd field and even field vertical filters (30a,30b) for filtering odd lines and even lines in the

MUSE signal, and time base expanders (32a,32b) for selecting predetermined lines from the lines filtered by the odd and even field vertical filters and for expanding on time base the selected predetermined lines. Also, another vertical filter (34) is provided for processing the signal from the time base expanders according to the sub-sampling phase.

Fig. 1

10 12 14 16 18 20 22a 22b 22c 22d 24a 24b 24c 24d 26a 26b 26c 28a 30a 30b 32a 32b 34 36a 36b 38 42

MUSE/NTSC DOWN CONVERTOR IC

112.5 MUSE SYS 52.5 NTSC SYS



European Patent  
Office

## EUROPEAN SEARCH REPORT

Application Number

EP 90 11 9830

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
A	IEEE TRANSACTIONS ON CONSUMER ELECTRONICS vol. 35, no. 3, August 1989, NEW YORK, US pages 142 - 150; M. ITOGA ET AL.: 'MUSE/NTSC Converter' * page 143, left column, line 1 - line 5 * * page 144, left column, line 1 - page 148, right column, line 15 * * figures 3-8, 13 *	1-2	H04N7/01
A	SIGNAL PROCESSING OF HDTV, II Proceedings of the Third International Workshop on HDTV; Turin, Italy, 30.08.-1.09.1989 Y. MIZUTANI et al.: 'Scanning Line Conversion from MUSE to EDTV'; pages 657-664 * the whole document *	1-2	
A	US-A-4 661 850 (STROLLE ET AL.) * abstract; figure 1 *	1-2	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			H04N
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 20 MAY 1992	Examiner SCHINNERL A.
<b>CATEGORY OF CITED DOCUMENTS</b>			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons A : member of the same patent family, corresponding document	